

TITLE

Apparatus and Methods for Producing Shrink Wrap Packaging

ABSTRACT OF THE DISCLOSURE

An apparatus (10) is disclosed including a web of film (20) extending between
5 first and second pairs of pinch rollers (12-15) and onto a vacuum table (18). A rotary
cutter (46) positioned before the first pair of pinch rollers (12, 13) includes laterally
extending and spaced knives (52) for creating cuts (54, 58) in the film (20) which
expand into vent openings (54') positioned over the sides (68) of the product (72) when
the film (20) is wrapped around and shrunk upon the product (72). A further rotary
10 cutter (30) positioned between the pairs of pinch rollers (12-15) includes a cut-off knife
(36) and first and second blades (44). The cut-off knife (36) creates a cut (60) in the
film (20) to form a single sheet of film (20) and includes notches (38) in its cutting
edge to form tie strips (62) connecting the single sheet to the web of film (20). A
kicker plate (84) of a rotatable tie strip breaker (80) engages the cut film (20) on the
15 vacuum table (18) at the trailing edge and at a speed faster than the film (20) is being
conveyed to place tensional force on and breaking the tie strips (62).